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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 08/855,905
Filing Date: May 14, 1997
Appellant(s): YAMANAKA ET AL.

Leo G. Lenna
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed September 20, 2007 appealing from the Office action mailed March 15, 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

Note, this application was previously appealed; Appeal No. 2005-2639 was filed on October 24, 2004 and a decision rendered by the Board of patent appeals and interference on December 16, 2005.

(3) Status of Claims

The statement of the status of claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

This appeal involves claims 1 and 28-49.

Claims 2-27 have been canceled.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

The following is a listing of the evidence (e.g., patents, publications, Official Notice, and admitted prior art) relied upon in the rejection of claims under appeal:

US 4,318,950	Takashi et al.	03/09/1982
EP 0613919	Ueda et al.	03/02/1994
US 5,233,924	Ohba et al.	08/10/1993

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1 and 28-49 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Takashi et al. (US 4,318,950) in view of Ohba et al. (US 5,233,924) and European Patent 0 613 919 A1 (herein referred to as Ueda).

Takashi discloses that it is well known in the art to make synthetic papers comprising oriented thermoplastic laminates. Inorganic fillers may be added to the thermoplastic resin prior to stretching in order to roughen the surface and render the film receptive to pencil, pen, and crayon markings (col 1, lines 19-46). It is also well known in the art that antistatic properties are desired in synthetic paper products.

Takashi teaches that a composition comprising inorganic fillers and a propylene matrix (col 7, line 63) are useful in making synthetic paper. Inorganic fillers comprise 0.5%-65*% of the composition (col 7, lines 8-10) and may be selected from the group consisting of calcium carbonate, silica, talc, titanium oxide, and clay (col 7, lines 1-4). The composition may further comprise an anti-static agent (col 8, lines 20-60, and the examples). Such agents are commonly added to synthetic papers in order to make the film more ink receptive during printing. The polypropylene composition containing inorganic filler is uniaxially oriented at least 2.5 times the original dimension, and possibly as high as 16 times the original dimension (col 5, lines 8-17). It is well known in the art to orient the film at a temperature lower than the melting point of the polypropylene resin. The film is stretch so that the void content is between 10-65% (claim 1,. equation is in Table VIIN col 17). The stretched film may be surface treated with corona discharge treatment at a voltage of 3,000 to 30,000 volts and a current of 0.5 to 5 amperes (col 4, lines 41-51). The polypropylene composition may be laminated to a biaxially oriented backing film layer (abstract). The thickness of such a laminate may be 30-140um, wherein the polypropylene composition has a thickness of 10-100um (Table IV, col 14).

With respect to the gloss limitation of claim 1, all the examples taught in Takashi have a gloss of 60% or less (see Tables VII (a) and VII(b)).

With regard to the opacity limitation of claim 1, Takashi does not teach the desired level of opacity of a synthetic paper. However, Ohba teaches a synthetic paper comprising a polyolefin matrix tilled with inorganic filler, wherein the opacity of the film is desirably at least 80% (abstract) because such an opacity is sufficient for writing with a pencil (col 1, lines 6-12). Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to alter the opacity of the film taught in Takashi so its above 80% because such an opacity is sufficient for writing with a pencil.

Takashi teaches the use of an anti-static agent in a synthetic paper polypropylene composition, but does not teach the claimed antistatic composition. However, Ueda teaches an antistatic which may be utilized in a polypropylene composition (page 9, lines 34-42). The composition taught in Ueda comprises:

component A: a polyolefin resin (55-95% by weight of the total composition)

component B: a polyetheresteramide antistatic agent (3-40% by weight)

component C: a polyamide resin (1-20% by weight), and

component D: a compatilizer (0.2-20%)

The polyetheresteramide is derived from a polyamide oligomer having a number average molecular weight of 300 to 3,000 and which contains carboxyl groups at each end and an alkylene oxide adduct of bisphenol having a number average molecular weight of from 300 to 5,000 (claim 1). For example, the polyetheresteramide can be synthesized from an s-caprolactam, an ethylene oxide adduct of bisphenol A and adipic

acid (page 12, example 1). Furthermore, 12-aminodecanoic acid may be used as the polyamide oligomer in place of the s-caprolactam (page 3, lines 2 1-29). Ueda teaches that polyetheresteramides having aromatic rings as component B have a reduced viscosity of from 0.5 to 4.0 in 0.5 % m-cresol solution at 25^0C (page 4, lines 21-24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the antistatic agent taught in Ueda in the synthetic paper taught in Takashi because the polyetheresteramide is known to be compatible with polypropylene, heat resistance, maintains its antistatic properties permanently (abstract), and does not rinse away in the presence of water.

Furthermore, it would have been obvious to utilize the polyetheresteramide in the amounts taught in Ueda because Ueda teaches that such amounts are sufficient for providing polypropylene matrixes with antistatic properties. Ueda further teaches that the polyamide of component C increases the surface orientation of the polyetheresteramide (col 6, lines 38-47). The polyamide is selected from the group consisting of nylon 66, nylon 69, nylon 601, nylon 612, nylon 6, nylon 1 1, nylon 12, and nylon 46 (page 5, lines 21-22). Preferably the polyamide resin has a reduced viscosity of from 0.8 to 5 in 97% sulfuric acid (concentration 11100m1) at 30OC (page 5, lines 22-25). Thus, it would have been obvious to one of ordinary skill in the art to add sufficient amounts of the polyamide taught in Ueda to the synthetic paper taught in Takashi in order to increase the surface orientation of the polyetheresteramide.

Ueda also teaches that a compatilizer is preferably utilized in order to improve compatibility with the resin, prevent interlaminar peeling of molded articles obtained,

and improve the mechanical strength and appearance of the final product (col 6, lines 55-61). When polypropylene is utilized as the thermoplastic matrix, preferred compatilizers include (a) an acid modified low molecular weight polyolefin having a number average molecular weight of from 800-25, 00 and an acid number of from 5-150, (b) a hydroxy modified low molecular weight polyolefin having a number average molecular weight of from 800 to 2. 5,000 and a hydroxy value of from 5 to 150, and c) an ester modified low molecular weight polyolefin obtained by partly or wholly esterifing an acid modified low molecular weight polyolefin with a polyoxyalkylene compound and having a number average molecular weight of from 1,000-28,000 (page 7, lines 21-29). Such a compatilizer may be obtained by reacting a low molecular weight polyolefin having a number average molecular weight from 700 to 20,000 with an unsaturated acid selected from methacrylic acid, maleic acid, maleic anhydride, fumaric acid, itaconic acid, itaconic anhydride, and citraconic anhydride (page 7, lines 30-39). The resulting product can be reacted further a) with an aliphatic amine selected from monomethanolamine, monoisopropanolamine, diethanolamine, and diisopropanolamine (page 7, lines 48-52), or b) by esterifying part or all of the carboxylic acid moieties of the modified low molecular weight polyolefin with a hydroxylated polyoxylalkylene compound (page 7, line 53 - page 8, line 9). The examiner takes the position that it would have been obvious to one of ordinary skill in the art to incorporate the compatilizers taught in Ueda in their taught amounts into the synthetic paper taught in Takashi in order to improve compatibility with the resin, prevent interlaminar peeling of

molded articles obtained, and improve the mechanical strength and appearance of the final product (col 6, lines 55-61).

(10) Response to Argument

(A) THE COMBINAITONOF TAKASHI ET AL WITH UEDA ET AL AND OHBA ET AL FAILS TO SUGGEST THE CLAIMED INVENTION AND ACCOMPANYING SYNERGISTIC ADVANTAGES T ONE SKILLED IN THE ART

Appellants argue the claimed invention is patentable over the prior art because Takashi fails to teach the claimed polyolefin composition and Ueda adds nothing to the teaching of Takashi which would render the claimed invention obvious. More specifically, Appellants argue that Ueda does not disclose the presence of a composition having antistatic properties in a stretched film and does not mention application of the resin composition to offset printing or flexography. The examiner acknowledges that Ueda does not disclose the use of the taught composition in a stretched film or the use of the composition in the offset printing art. However, the rejection did not rely upon Ueda for either teaching. Rather, Takashi was relied upon to teach an oriented polypropylene composition having antistatic properties used in the offset printing art. In response to appellants' arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The claimed invention is further patentably distinguished from the prior art, according to Appellants, because it possesses unexpected results in that the paper has excellent printability including excellent permanent antistatic properties and offset printability. In support of said position, Appellants point to comparative examples 1-3 in the specification. Appellants argue that comparative example 1 demonstrates that when a surface layer of a laminated paper composition does not contain the claimed antistatic resin, then ink adhesion properties during offset printing are poor. Specifically, Comparative example 1 is an embodiment in which no anti-static agent is included in the surface layer. However, one of ordinary skill in the art would have expected said comparative example 1 to have poor ink adhesion properties. As noted by appellants on page 1 of the specification, "For use as synthetic papers, polypropylene resin films are required not only to possess improved antistatic properties so as to have satisfactory suitability for paper feeding and discharge (suitability for film feeding), but also to be printable by gravure printing, offset printing, flexography, etc."

With regard to comparative example 2, Appellants argue said example shows poor ink adhesion properties and offset printing when the surface layer does not contain inorganic filler. However, one of ordinary skill in the art would have expected a surface layer that does not contain filler to possess such properties. Specifically, Takashi teaches that the filler is necessary to create micro-voids that improve the ink adhesion properties of the synthetic paper (see '950; col 5, lines 8-56).

With regard to comparative example 3, Appellants argue said surface layer shows poor ink adhesion, surface resistivity, and paper feeding/discharge when the

surface layer is not subjected to stretching. Again, one of ordinary skill in the art would have expected a surface layer that was not stretched to possess such properties. Specifically, Takashi teaches that the filler is necessary to orient a surface layer of a synthetic paper in order to improve the ink adhesion properties of the synthetic paper (see '950; col 5, lines 8-56).

(B)

Appellants further argue that it has been found that the effect of orienting the claimed composition decreases the surface resistivity of the resin composition from 10^{14} to10^{11}ohm and that said unexpected benefit of orientation of on antistatic properties was previously unknown. As noted in the Office Action of November 28, 2002, said showing has been considered but is insufficient for establishing unexpected results because Appellants have not compared the claimed invention to the closest prior art. The closest prior art is an embodiment of Takashi that comprises an antistatic agent other than the claimed antistatic agent. Since Appellants has failed to demonstrate that the decrease in surface resistivity as a result of orientation is an unexpected result of the claimed invention, said property is herein understood to be a latent property of the synthetic paper taught in Takashi.

With respect to Takashi, Appellants argue that the amount of low molecular weight antistatic agent incorporated into the composition is only 0.1-1.0pbw, wherein the claimed invention comprises 5-40wt% of an antistatic agent. In response to appellants' arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of

references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Takashi was never relied upon to teach the claimed amount of antistatic agent added to the polypropylene composition. Rather, Ueda was relied upon to teach the use of 5-40wt% of a high molecular weight antistatic agent in the surface layer of Takashi.

Appellants further argue that by relying upon Ueda solely to teach the addition of claimed components B-D to the polypropylene surface layer taught in Takashi, the examiner is merely picking and choosing selected portions of each reference with no regard to event the slightest suggestion of combining the two references. The examiner respectfully disagrees. Ueda motivates the addition of component B to a polypropylene composition because said antistatic agent is compatible with polypropylene, heat resistant, and maintains its antistatic properties permanently (abstract). Ueda motivates the addition of component C to a polypropylene composition because it increases the surface orientation of component B. Ueda motivates the addition of component D to a polypropylene composition because said component improves compatibility of components B and C with the resin, prevents interlaminar peeling, and improves the mechanical strength and appearance of the final product (col 6, lines 55-61). Thus, each modification suggested by the combination of references is clearly motivated by the disclosure of the prior art and is not a situation in which the examiner merely picked and choose selected portion of each reference.

(C)

In subsection (c) of the arguments section of the brief, Appellants argue the Ueda does not teach the formation of an oriented sheet by extrusion. As noted above, the examiner concedes Ueda does not teach an extruded, oriented sheet, but notes the rejection never relied upon Ueda for such a teaching. Rather, Takashi was relied upon to teach an extruded, oriented polymer sheet. Appellants further argue that the molding mechanism taught in Ueda is completely different from the extrusion mechanism taught in the present invention. The examiner initially notes that the teachings of Ueda are not limited to molded composition but are broad enough to read on any antistatic resin composition containing the polyetheresteramide antistatic agent (page 1, lines 3-6 and lines 41 and 42). Furthermore, the examiner maintains the position that Takashi and Ueda are analogous because both references are in the field of appellants' endeavor and the teachings of Ueda are reasonably pertinent to the particular problem with which Takashi is concerned. Ueda and Takashi are herein understood to be in the same field of endeavor because each reference is drawn to an antistatic polypropylene composition. The teachings of Ueda are herein understood to be reasonably pertinent to the particular problems with which the inventor was concerned because Ueda is pertinent to the problem of retention of anti-static properties in polypropylene films.

Appellants further argue that the compositions taught by Ueda do not contain filler and do not have voids therein. The examiner concedes that the compositions taught in Ueda do not contain filler or voids. However, Ueda was never relied upon for such a teaching. Rather, the rejection relied upon Takashi to teach a polypropylene composition comprising filler and voids. In response to appellants' arguments against

the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In an attempt to distinguish the claimed invention from the prior art, the experimentation set forth in the second supplemental Declaration executed by joint inventor Masaaki Yamanaka contains a film that was attempted to be produced by using the composition of Ueda under the conditions of Takashi. The composition of Example 43 was selected as the closest to the present invention. As a result of the experimentation, a biaxially stretched film could not be obtained. Appellants speculate that the film could not be obtained because the polypropylene used in the example had a MFR of 9g/min, high flowing property and low melt tension. The declaration is not persuasive because said example does not represent the closest prior art because the rejection does not take the position that it would have been obvious to biaxially orient the polypropylene resin taught in Ueda. The examiner also notes that Appellants speculate that the polypropylene resin, not components B-D, is the reason the composition could not be oriented. Since the polypropylene resin taught in Ueda is not part of the laminate rendered obvious by Takashi in view of Ueda and Appellants conclude the polypropylene of Ueda is the reason the composition could not be oriented, said declaration fails to establish a showing of unexpected results.

(D)

In subsection (d) of the arguments section, Appellants argue that Ohba adds nothing to the combination of Takashi and Ueda because the synthetic paper taught therein differs in composition and construction from the laminate of the claimed invention. The examiner respectfully disagrees. A prior art reference is analogous if the reference is in the field of appellants' endeavor or, if not, the reference is reasonably pertinent to the particular problem with which the inventor was concerned. Takashi and Ohba are each in the same field of endeavor: synthetic papers. Therefore, the examiner maintains the position that the teachings of Ohba are combinable with the teachings of Takashi.

(E) /(F)

Appellants have filed five declarations from Masaaki Yamanaka in an attempt to patentably distinguish the claimed invention from the prior art.

The first declaration executed by inventor Masaaki Yamanaka is a comparison of the inventive paper to one prepared according to Takashi showing a clear improvement in the antistatic properties possessed by the inventive paper over Takashi. Experiments 1 and 2 have been fully considered, but merely show what one of ordinary skill in the art at the time the invention was made would have expected. Specifically, Ueda recognizes that the claimed antistatic composition will be retained after washing (see the examples and Table 1). Thus, Appellants arguments are not persuasive.

With regard to Yamanaka's first supplemental declaration, Appellants argue that the declaration documents the comparative testing in Yamanka's first declaration was carried out under identical conditions for all paper. However, as discussed above, the

showing of the first declaration fails to patentably distinguish the claimed film from the prior art.

(G)

The first supplemental Declaration also contains 2 experiments. Experiment I was conducted in the same manner as in Comparative example 2 of the specification, and Experiment 2 was conducted in the same manner as Comparative example 3 in the specification. Appellants argue said experiments demonstrate that the antistatic properties of the polymeric antistatic agent incorporated are greatly improved by stretching. Said showing was non-persuasive because the claimed invention was not compared to the closest prior art. The closest prior art is an embodiment of Takashi that comprises an antistatic agent other than the claimed antistatic agent. Since Appellants have failed to demonstrate that the decrease in surface resistivity as a result of orientation is an unexpected result of the claimed invention, said property is herein understood to be a latent property of the synthetic paper taught in Takashi.

(H)

In the second supplemental declaration executed July 12, 2002, a comparison was conducted between example 12 of Takashi with both polyetheresteramide and other antistatic agent against the inventive paper. The inventive paper shows improvement with regard to antistatic properties and printability. However, the examiner found the results non-persuasive for a number of reasons. Specifically, the experiment does not agree in scope with the present claims because the claims do not require a 3-layered film. Furthermore, the declaration shows that the paper of Takashi (with both

polyetheresteramide and other antistatic agent) has high surface resistivity after washing. Said result is not unexpected in view of the teachings of Ueda, who teaches a composition comprising components A-D will retain its antistatic properties after washing. Furthermore, one of ordinary skill in the ad would also expect a sheet with high surface resistivity to exhibit poor offset printing (see page 1 of the specification, Background of the invention).

Appellants further argue that the examples in the second supplemental declaration are papers according to the combination of Takashi with Ueda. The examiner respectfully disagrees. The examples of the declaration do not contain components B and C, whereas the papers according to the proposed combination of Takashi with Ueda do comprise components B and C.

Appellants further argue that the examiner contradicts himself by first stating that Ueda is not relied upon for teaching the entire surface layer composition of the paper rendered obvious by Takashi in view of Ueda, and then stating that Ueda is not limited to molded compositions. The examiner disagrees that said two statements contradict one another. By stating that the rejection does not rely upon Ueda to teach the entire surface layer composition of the paper taught in Takashi, the examiner was noting that Experiment 5 of the declaration (in which Appellants tried to process the composition taught in Ueda according to the processing condition of Takashi) was not representative of the combination of reference relied upon by the Office. The second statement (that Ueda is not limited to molded compositions) was made to refute Appellants' argument

that Ueda and Takashi are not analogous because the teachings of Ueda are only relevant to molded compositions.

(I)

With regard to the third supplemental declaration, the paper taught in Takashi was compared to the claimed paper. The data shows that the claimed paper had better resistivity and offset printing. However, as explained above, said result is not unexpected. Specifically, Ueda teaches that a composition comprising components A-D of the claimed composition should possess better retention of antistatic properties and that said antistatic properties would not be reduced by washing with water (see Table 1). Appellants further argue that Experiment 8 of the declaration shows that the papers prepared according to Takashi and containing the antistatic agent of the type taught in Ueda still failed to result in good resistivity and printability. Again, said results are not persuasive because one of ordinary skill in the art would have expected said results. Specifically, Ueda teaches that the use of polyetheresteramide in and of itself is not sufficient to give a composition having permanent antistatic properties (see page 1 of Ueda). The polyetheresteramide must be used with components C and D to obtain the desired properties.

(J)

Appellant a fourth supplemental declaration describing experiments of the "side-by-side" comparison and the results obtained from those experiments. According to appellant, experiment 1 was conducted in the same manner as example 12 of Takashi. Experiment 2 was prepared in the same manner as experiment I except a high

molecular weight antistatic agent was used instead of a low molecular weight antistatic agent. Example 3 was prepared in the same manner as experiment 1 except a low molecular weight antistatic agent was used at 20pbw. Experiment 4 was prepared as in the present invention (experiment 1 in the specification). Appellant argues experiments 1 and 3 show low molecular weight antistatic agents will be washed out of the composition. Said showing is expected in view of the teachings of the prior art (see Ueda).

Appellant further argues Experiments 2 and 4 demonstrate the high molecular weight antistatic agent does not wash out. Said results are expected by the prior art (see Ueda abstract which teaches permanency of antistatic properties). Appellant further argues that offset printability of the paper was evaluated and demonstrated that only the inventive example (Example 4) would not become problematic and there would not be a high frequency of paper feeding/discharge because of a high surface resistivity. Said result is again considered to be expected in view of the prior art. Specifically, the prior art recognizes the relationship between paper feeding/discharge and surface resistivity. Thus, the skilled artisan would expect a paper with a high surface resistivity to be problematic with respect to paper feeding/discharge. Examples 1 and 3 exhibit high surface resistivity because the low molecular weight antistatic agent bleeds from the composition. Example 2 contains too little high molecular weight antistatic agent to achieve a desirable surface resistivity.

The example further notes that multiple variables are altered between examples 2 and 4. Therefore, no conclusion can be drawn as a result of the showing in the

declaration because it is unclear what variables are responsible for any possible showing of differences between the surface resistivity and/or paper feeding properties of the examples.

(K)

Appellant argues there is no motivation to replace the antistatic agents listed in Takashi with the specific one of the claimed invention. The examiner respectfully disagrees. Ueda provides the requisite motivation for utilizing the claimed antistatic agent. Specifically, Ueda teaches said antistatic agent provides permanent antistatic properties to polypropylene compositions. Appellant argues that Ueda teaches the use of the claimed antistatic agent with "poyolefins" amongst other polymers and, therefore, the teachings of Ueda would not lead to the use of the specific antistatic agent in the polypropylene composition of Takahashi. The examiner respectfully disagrees and notes that the applied rejection does not require the selection of polypropylene from the various teachings of Ueda. Takashi meets the claimed polypropylene limitation. Thus, appellant's arguments with respect to "picking and choosing" from the disclosure of Ueda are considered moot to the legal question at issue.

Appellant further argues that Takashi does not state there is any problem with using any of the many antistatic agents listed in the disclosure. Thus, the skilled artisan would not have been motivated to alter said teachings. The examiner notes that the law does not require the primary reference to explicitly disclose a deficiency in order for a proposed alteration to be "obvious" under 35 U.S.C. 103(a).

(L)

With regard to the dependent claims, Appellants argue that the references fail to teach the specific stretching amounts of the paper of claim 30. The examiner respectfully disagrees. Takashi teaches uni-axially orienting the film to the extent of 2.5-16 times the original dimension (col 5, lines 8-17).

With regard to claim 31, Appellants argue that the references fail to teach the void content. The examiner respectfully disagrees. Takashi teaches a void content of 10-65% (claim 1).

Appellants further argue that none of the reference disclose cracks on the surface of the film through which antistatic agent can penetrate to the surface. The examiner respectfully disagrees. Takashi teaches the creation of voids on the surface of the film. Said voids are herein understood to read on the claimed cracks. Furthermore, Ueda teaches that component C will surface orient the antistatic agent (component B).

Appellants further argue that the oxidation treatment of claim 32 and the corona discharge level of claim 33 are not disclosed. The examiner respectfully disagrees. Takashi teaches corona treating the surface layer at a voltage of 3,000 to 30,000 volts and a current of 0.5-5 amperes (col 4, lines 41-51).

Appellants further argue that the viscosity values of components B and C recited in claims 34 and 38 are not disclosed. The examiner respectfully disagrees. Ueda teaches that component B should have a viscosity of 0.5-40 in a 0.5%m-cresol solution

at 25°C) (page 4, lines 21-24) and the component C should have a reduced viscosity of 0.8-5 in 97% sulfuric acid, concentration 1g/100ml, 30°C (page 5, lines 22-25).

Appellants further argue that the paper structure of claims 47 is not taught by the prior art. The examiner respectfully disagrees. Takashi teaches a laminate comprising a biaxially oriented thermoplastic base material and a surface layer consisting of a uniaxially oriented film of the claimed composition (abstract).

Appellants further argue that the thickness ranges of claims 46 and 48 are not taught. The examiner respectfully disagrees and points appellants' attention to table IV of Takashi.

Appellants further ague that the stretching into long particles recited in claim 49 is not disclosed. The examiner respectfully disagrees. Ueda teaches that the polyamide has a higher melting point than the polypropylene matrix (col 6, lines 38+). Prior art teaches that when a higher melting point resin is incorporated into the matrix of a lower melting point resin, and the matrix resin is oriented at a temperature higher than the softening point but lower than the melting point of the other resin, the resulting matrix contains oriented particles. Thus, the stretching of the components B-D into long particles would inherently occur as a result of the proposed combination of Takashi and Ueda.

(11) Related Proceeding(s) Appendix

Copies of the court or Board decision(s) identified in the Related Appeals and Interferences section of this examiner's answer are provided herein.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Conferees:

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Patent Examiner-Art Unit 1794

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/Romulo Delmendo/
Romulo Delmendo
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